## SELECTING A TRACK DENSITY FOR EACH DISK SURFACE OF A DISK

## DRIVE BASED ON HEAD CHARACTERISTIC

## ABSTRACT OF THE DISCLOSURE

A method of selecting a track density for a disk surface of a disk drive is disclosed. A first pattern is written along a circumferential path of the disk surface, wherein the first circumferential path comprise a first set of arcuate sections interleaved with a second set of arcuate sections. A second pattern is written radially offset from the circumferential path during time intervals corresponding to the first set of arcuate sections. The head is positioned substantially over the center of the first circumferential path and during time intervals corresponding to the second set of arcuate sections, the first pattern is read to generate a first read signal amplitude measurement A0, and during time intervals corresponding to the first set of arcuate sections, the first pattern is read to generate a second read signal amplitude measurement A1. A track density is selected in response to A0 and A1, wherein the track density is for use in writing embedded servo sectors to the disk surface.